

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 88-040

UPDATED REQUIREMENTS FOR:

TURK ISLAND COMPANY
TURK ISLAND CLASS III LANDFILL
UNION CITY, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. Turk Island Company, the site legal owner and the landfill operator, (hereinafter referred to as the discharger) submitted a Report of Waste Discharge dated September 29, 1975 (EMCON Associates), May 1978 and January 1980 (Beta Associates) and a site Closure Plan dated January 31, 1986 (Beta Associates) for the operation and closure of a Class III landfill in south Union City, Alameda County. The Board adopted Order No. 81-3 on January 21, 1981 prescribing revised Waste Discharge Requirements (WDR) for this waste disposal operation. This Order is an update of Order No. 81-3 pursuant to Title 23, Chapter 3, Subchapter 15 of the California Administrative Code (Subchapter 15).
2. The landfill occupies approximately 50 acres and contains approximately 4 million cubic yards of domestic, commercial, and industrial solid waste and earthen fill cover materials; including auto shredder and paint wastes. Turk Island is located in the tidal fringe of the southeast portion of the bay plain. The site is bounded by salt evaporation ponds on the west side and a flood control channel on the north side. (See Attached Site Map) The current use of the land surrounding the site is agricultural, with salt evaporation on the west side.
3. The Turk Island Landfill is located within the Coast Range geomorphic province at the northern extent of the Santa Clara Valley and the southern portion of San Francisco Bay. The Coyote Hills are approximately one mile southwest of the site. The site is located in former marsh land along the bay fringe near the boundary of the alluvial deposits of the Niles Cone and the Estuarine deposits of San Francisco Bay. The sediments underlying the site are relatively thin sequences of alluvium composed of predominantly clay, silty clay, and minor amounts of sandy clay. The blue grey clay (i.e. young Bay Mud) underlying the site extends to a depth of 10 to 15 feet below Mean Sea Level (MSL). Underlying the young bay is a complex, interbedded sequence of old bay mud and fine grained alluvium to a depth of approximately 30 to 35 feet below MSL. The laboratory permeability of the younger and older Bay Mud ranges from approximately 1×10^{-8} cm/sec. to 1×10^{-6} cm/sec and the in-situ permeability of these soils ranges from 1×10^{-7} cm/sec to 1×10^{-6} cm/sec. Below the older bay muds are layers of sands and gravels with interbeds of silty clays which form the Newark Aquifer.

4. Turk Island is located approximately 4 and 12 miles southwest of the Hayward and Calaveras faults, respectively, and 15 miles east of the San Andreas fault. The site is not located on a known Holocene fault and therefore meets the siting criteria contained in Section 2533(d) of Subchapter 15. The site is shown to be in a flood plain on the Federal Insurance Administration flood map. However, the site is protected by an 8.5 foot high perimeter embankment that is designed to protect the site from flooding. Therefore, the site meets the flood protection criteria for Class III landfills contained in Subchapter 15.
5. Groundwater occurs at the site in two different portions of the alluvial deposits that underlie the site. The first zone of groundwater occurs in the younger and older bay muds and the perched lenses of silty sand within the bay mud. This perched groundwater exists from just below the natural ground surface to a depth of approximately 35 feet. This groundwater is of brackish quality and is currently not a usable water supply. This first encountered groundwater occurs due to rainwater infiltration and recharge from flood control channels and the salt ponds adjacent to the site. Due to the low permeability of the young bay muds, and the limited extent of the perched silty sand lenses within the young bay mud, the first encountered groundwater is of limited quantity and moves very slowly. The perched lenses of silty sand material in the bay mud, as well as the slow movement of groundwater within the bay muds, provide a limited connection between the groundwater beneath the site and the deeper groundwater in the Newark Aquifer and possibly with the surrounding surface waters.
6. The second occurrence of groundwater beneath the site occurs at a depth of approximately 45 to 65 feet below the natural ground surface and extends to a depth exceeding 200 feet below the ground surface. This groundwater occurs in the more permeable silty sand, sand, and gravel alluvial deposits beneath the bay muds. This groundwater is known as the Newark Aquifer. The Alameda County Water District has installed wells in the Newark Aquifer near the site as part of the salinity barrier project designed to reverse salt water intrusion from beneath the bay and salt ponds. The pumping of the salinity barrier project wells near the site may increase the interconnection between the landfill, and the groundwater immediately beneath the landfill, and the Newark Aquifer.
7. Due to the shallow first encountered groundwater beneath the site, and the buildup of leachate within the landfill, the site does not meet the criteria contained in Section 2530(c) of Subchapter 15 that requires all existing landfills to be operated to ensure there is a minimum of five feet between the wastes and the underlying groundwater. The site design and closure plan do not provide for compliance with the requirements of Section 2530(c), because there is not a five foot separation between the wastes and the shallow perched groundwater.

8. The discharger has submitted a site closure plan, dated January 31, 1986 that proposes to close the landfill according to the requirements of Article 8 of Subchapter 15. This closure plan does not propose a groundwater monitoring plan that complies with the requirements of Article 5 of Subchapter 15 nor does it propose a mechanism for financial assurance for the post closure monitoring and maintenance of the site.
9. Background water quality levels, in the two water bearing zones beneath the site, for the purpose of establishing Water Quality Protection Standards (WQPS), have not been determined according to the requirements of Subchapter 15. Compliance with this Order will provide for the establishment of WQPS according to the requirements of Subchapter 15 within one year after adoption of this Order.
10. Groundwater wells within a mile of the site have not been identified according to the requirements of Subchapter 15.
11. The present and potential beneficial use of the shallow perched groundwater found in the surficial alluvial deposits beneath the site, (Elevation MSL to -20 feet below MSL) is to recharge the surface waters surrounding the site, which discharge to South San Francisco Bay, and the deeper groundwater. The beneficial uses of South San Francisco Bay are as follows:
 - a. Wildlife habitat
 - b. Navigation
 - c. Water contact recreation
 - d. Non-water contact water recreation
 - e. Commercial and Sport fishing
 - f. Preservation of rare and endangered species
 - g. Estuarine habitat
 - h. Fish migration and spawning

The present and potential beneficial uses of the deeper groundwater (below elevation -45 to -65 feet below MSL) are as follows:

- a. Domestic and municipal water supply
 - b. Industrial process supply
 - c. Industrial service supply
 - d. Agricultural supply
12. The discharger submitted, as a part of their Report of Waste Discharge, the reports cited in Finding No. 1 of this Order. The above cited reports, as modified by the requirements of this Order, propose to construct and close the landfill in accordance with the requirements of Subchapter 15 and are hereby incorporated as a part of this Order.
 13. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin on December 17, 1986 and this Order implements the water quality objectives stated in that plan.

14. This project constitutes a minor modification to land for the continued operation and closure of an existing landfill, with changes to meet public health and safety standards, and is therefore categorically exempt from the provisions of the California Environmental Quality Control Act (CEQA) pursuant to Sections 15301 and 15304 of the Resources Agency Guidelines.
15. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge, and has provided them with an opportunity to submit their written views and recommendations.
16. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Turk Island Company, and any other persons that currently or in the future own this land or operate this facility, shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall also comply with the following:

A. PROHIBITIONS

1. The disposal of waste shall not create a pollution or nuisance as defined in Section 13050(1) of the California Water Code.
2. Wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
3. Wastes shall not be disposed of in any position where they can be carried from the disposal site and discharger into waters of the State or of the United States.
4. No additional liquid, solid, or semi-solid wastes, of any type, shall be disposed of at this site, with the exception of leachate and methane gas condensate generated at the site.
5. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:
 - a. Surface Waters
 1. Floating, suspended, or deposited macroscopic particulate matter or foam.
 2. Bottom deposits or aquatic growth.
 3. Alteration of temperature, turbidity, or apparent color beyond natural background levels.
 4. Visible, floating, suspended or deposited oil or other products of petroleum origin.

5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

b. Groundwater

1. The groundwater shall not be degraded as a result of the waste disposal operation.
6. Leachate from wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State or the United States.

B. SPECIFICATIONS

1. Water used during closure operations shall be limited to a minimal amount necessary for dust control and fire suppression. The site shall not be irrigated.
2. The site shall be designed, constructed and operated to prevent inundation, washout or erosion of wastes or covering material which could occur as a result of a 100 year 24 hour precipitation event or flood event.
3. Surface drainage from tributary areas, and internal site drainage from surface and subsurface sources, shall not contact or percolate through wastes during disposal operations or during the life of the site. Drainage ditches constructed over refuse fill will be underlain with a minimum 5-foot thickness of compacted earthfill. Surface drainage ditches shall be constructed to ensure that all rainwater is diverted off-site and does not contact wastes, and leachate.
4. The discharger shall install and operate a leachate collection removal system (LCRS) so as to minimize the buildup of leachate in the landfill and ensure compliance with Section 2530(c) of Subchapter 15 by ensuring that wastes in the landfill are not saturated and are at least five feet above the highest anticipated elevation of the underlying groundwater. Measures shall be taken to ensure that leachate in the leachate collection system can flow freely into any collection sump. Measures shall also be taken to assure that leachate collection sumps and extraction wells will remain operational permanently.
5. The leachate monitoring and control system, shall be designed, maintained and operated to prevent the build-up of hydraulic head on the bottom of the landfill as well as the toe of the landfill. This system shall be inspected weekly, and any accumulated fluid shall be removed.

6. The discharger shall ensure that the foundation of the site, the levees surrounding the site, the refuse fill, and the structures which control leachate, surface drainage, erosion and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake.
7. As portions of the landfill are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation and prevent the ponding of water on the landfill cover. In addition, all completed disposal areas shall be covered with a minimum of 4 feet of cover and meet other applicable requirements as described in Article 8 of Subchapter 15.
8. The discharger shall operate the waste management facility so as not to cause a statistically significant difference to exist between water quality at the compliance points and the following Water Quality Protection Standards. The compliance points are identified as monitoring wells MW-1 thru MW-7 and MW-4A. The background monitoring wells are MW-8, for the shallow groundwater and MW-8A to be installed to provide background groundwater data for the Newark Aquifer. The discharger shall establish these WQPS according to the requirements of this Order and Article 5 of Subchapter 15 within one year of adoption of this Order.
 - a. pH=
 - b. Specific Conductivity=
 - c. Chloride=
 - d. Total Organic Carbon=
 - e. Nitrate Nitrogen=
 - f. Total Kjeldahl Nitrogen=
 - g. Total Phenol=
 - h. Total Dissolved Solids=
 - i. Arsenic=
 - j. Total Chromium=
 - k. Copper=
 - l. Nickel=
 - m. Zinc=
 - n. Lead=
 - o. PCBs=
9. The discharger shall install any additional groundwater and leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the discharger in order that the Board may evaluate compliance with the conditions of this Order.

C. PROVISIONS

1. The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order, except Specifications B.4, B.5, and B.8, immediately upon adoption of this Order. The discharger shall construct and operate the landfill according to the design plans cited in Finding No. 1 of this Order.

The discharger shall comply with Specifications B.4, B.5 and B.8 according to the following schedule:

TASK

COMPLIANCE
DATE

- A. The discharger shall submit a detailed leachate management plan. This plan should evaluate the quantity of leachate produced, the storage of the leachate, and the ultimate disposal of the leachate. The plan should provide details of the leachate storage facilities on site and a more thorough evaluation of leachate disposal during the post closure maintenance of the site. This management plan should also provide for an annual evaluation of the leachate generated at the site and determine if recirculation of leachate into the landfill is feasible based upon a demonstration that the quantity of leachate being recirculated will not exceed the moisture holding capacity of the landfill using a moisture content of the solid waste of at least 30%. The proposal for a LCRS should ensure compliance with Specifications B.4 and B.5 of this Order and Section 2530(c) of Subchapter 15. The discharger may apply for exemptions from these requirements pursuant to Section 2510 of Subchapter 15. July 1, 1988
- B. The discharger shall submit a report on the groundwater quality at the site that proposes Water Quality Protection Standards for the constituents listed in Specification B.8 of this Order according to the requirements of Article 5 of Subchapter 15. If it is determined that the statistical comparison requirements of Article 5 are infeasible the report should include a proposal, pursuant to Section 2510(b) of Subchapter 15, for an alternative comparison procedure. The report shall also include a survey of all groundwater wells within a mile of the site pursuant to Section 2595(h) of Subchapter 15. May 1, 1989

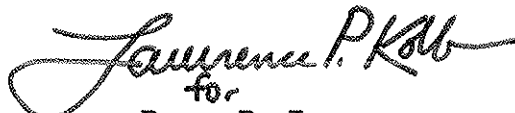
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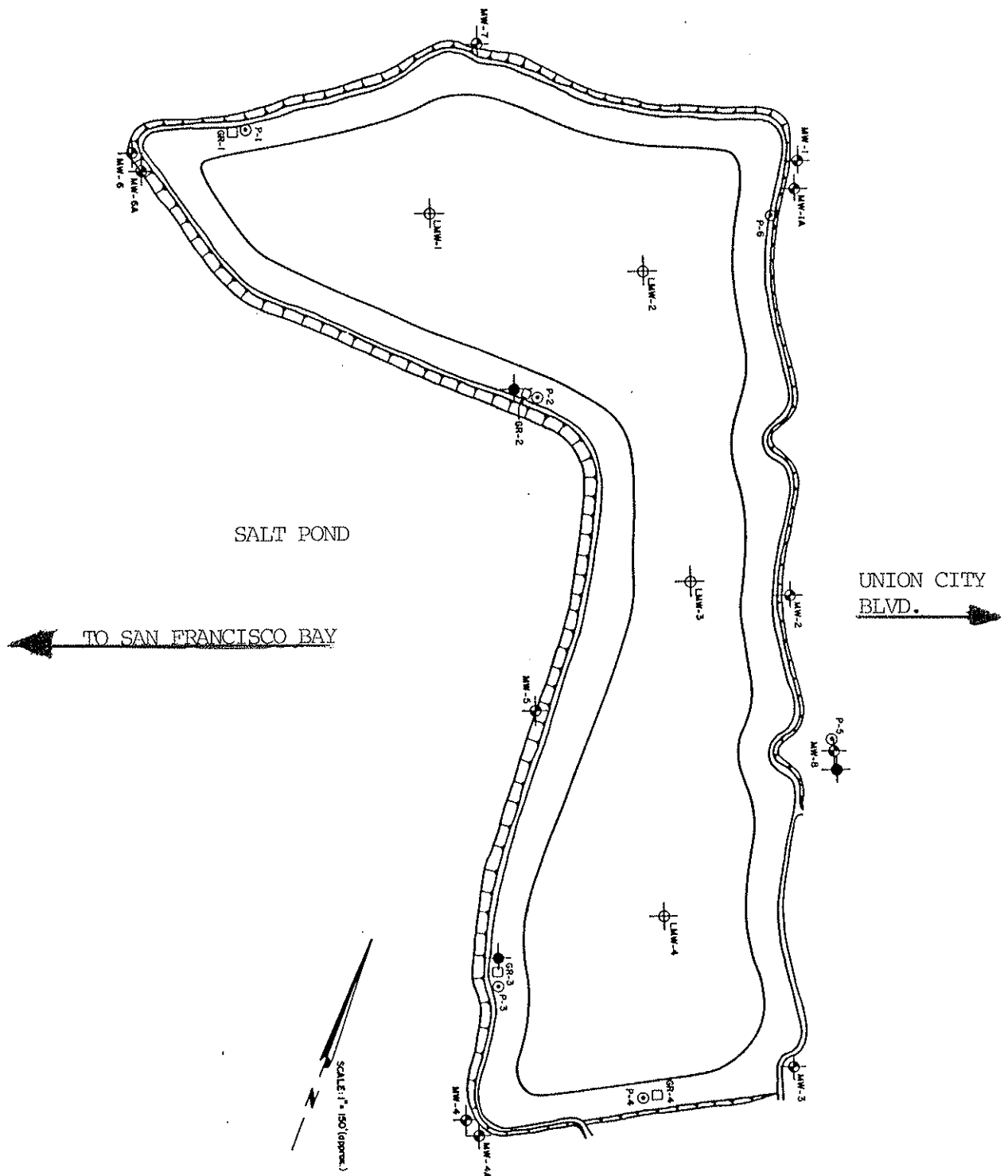
- C. Complete construction and comply with all requirements of this Order and Subchapter 15. July 1, 1989
2. The discharger shall submit, by June 1, 1988, an as built certification report that documents that the landfill was closed according to the closure plan cited in Finding No. 1 of this Order and the requirements of Subchapter 15. The report should be prepared and signed by a registered civil engineer or certified engineering geologist that supervised the closure of the landfill. The report should include data to document the permeability of the final cover soils and the construction of the perimeter berm, including a recent topographic map showing the locations of all design features and test locations; including two permanent monuments that can be used to survey the locations of design features and wastes. This report shall also include the boring and construction logs, and testing results for permeability, transmissivity, hydraulic conductivity, and storativity for the recently installed monitoring wells and the water bearing zones which they monitor.
 3. The discharger shall submit, by June 1, 1988, an amendment to the site closure plan that will provide for the inspection and maintenance of the landfill during the post closure period of the landfill. The post closure plan should include a schedule for final cover repair based upon an estimate of the settlement of the final cover so as to ensure compliance with the requirements of this Order and Subchapter 15. This report should also include an estimate of the post closure monitoring and maintenance costs and propose a financial assurance mechanism, to cover these costs for at least 30 years, that complies with Section 2580(f) of Subchapter 15.
 4. The discharger shall file with the Regional Board quarterly self-monitoring reports performed according to any self-monitoring program issued by the Executive Officer.
 5. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
 6. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
 7. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.

8. The discharger shall maintain a copy of this Order at the site so as to be available at all time to site operating personnel.
9. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations.
10. The discharger shall maintain all devices or designed features installed in accordance with this Order such that they continue to operate as intended without interruption except as a result of failures which could not have been reasonably foreseen or prevented by the discharger.
11. The discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:
 - a. Entry upon the premises on which wastes are located or in which any required records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.
 - d. Sampling of any discharge or groundwater covered by this Order.
12. This Board's Order No. 81-3 is hereby rescinded.
13. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 16, 1988.


for
Roger B. James
Executive Officer

Attachments: A) Site map
B) Self Monitoring Program



- EXPLANATION**
- EXISTING GROUNDWATER MONITORING WELL (TO BE ABANDONED)
 - LMW-4 ○ PROPOSED LEACHATE MONITORING WELL LOCATION
 - GR-4 □ EXISTING LEACHATE SUMP
 - P-5 ⊙ PROPOSED LEACHATE PIEZOMETER
 - MW-1 ○ PROPOSED GROUNDWATER MONITORING WELL

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
ATTACHMENT A: TURK ISLAND CLASS III LANDFILL		
SITE MAP WITH MONITORING WELL LOCATIONS		
DRAWN BY:	DATE:	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

TURK ISLAND COMPANY
TURK ISLAND CLASS III LANDFILL
UNION CITY, ALAMEDA COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Section C.4 of Regional Board Order No. 88-040.

The principal purposes of a self-monitoring program by a waste discharger are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to most recent version of Standard Methods for the Analysis of Wastewater.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.
2. Receiving waters(s) refers to any water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill, and the surrounding surface drainage ditches and South San Francisco Bay are considered the receiving waters.
3. Standard observations refer to:
 - a. Receiving Waters
 - 1) Discoloration and turbidity: description of color, source, and size of affected area.
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of beneficial use: presence of water associated wildlife.
 - 4) Flow rate.
 - 5) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.
 - b. Perimeter of the waste management unit.
 - 1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.
 - c. The waste management unit.
 - 1) Evidence of ponded water at any point on the waste management facility.
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.

4. Standard analysis and measurements refer to:

- a. pH
- b. Electrical Conductivity (EC)
- c. Total Dissolved Solids (TDS)
- d. Total Phenols
- e. Chloride
- f. Total Organic Carbon
- g. Nitrate Nitrogen
- h. Total Kjeldahl Nitrogen.
- i. Water elevation in feet above Mean Sea Level.
- j. EPA Method 601, identifying all peaks greater than 1 microgram/liter.
- k. Settleable Solids ml/l/hr
- l. Arsenic
- m. Total Chromium
- n. Copper
- o. Nickel
- p. Zinc
- q. Lead
- r. Cadmium
- s. Total PCBs

D. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements of Article 5 of Subchapter 15.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory.
5. Calculation of results.
6. Results of analyses, and detection limits for each analyses.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written self-monitoring reports shall be filed each calendar quarter by the fifteenth day of the following month. In addition an annual report shall be filed as indicated in F.2 The reports shall be comprised of the following:

- a. Letter of Transmittal

A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the past quarter and actions taken or planned for correcting the violations, such as operation modifications and/or facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last quarter this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer at the level of vicepresident or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

- b. Each report shall include a compliance evaluation summary sheet. This sheet shall contain:

1. The sample mean and the sample variance for all sample sets taken from all compliance points, and shall determine if the difference between the mean of each sample set and the water quality protection standard is significant at the 0.05 level using Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix II of Subchapter 15. The discharger may propose an alternative statistical procedure to be used in making this determination pursuant Section 2555(h)(3) of Subchapter 15. If a statistically significant difference is found this shall be reported as a suspected requirement violation in the letter of transmittal.
2. A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

- c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

- d. Laboratory statements of results of analyses specified in Part B must be included in each report. The laboratory director shall sign the laboratory statement of analytical results.
 - e. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.
 - f. The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations.
 - g. An evaluation of the effectiveness of the leachate monitoring/control facilities. This shall include an evaluation of compliance with Specifications B.4 and B.5 of Order No. 88-040.
2. By January 31 of each year the discharger shall submit an annual report to the Regional Board covering the previous calendar year. This report shall contain:
- a. Tabular and graphical summaries of the monitoring data obtained during the previous year.
 - b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
 - c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
 - d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
 - e. An evaluation of the effectiveness of the leachate monitoring/control facilities. This shall include an evaluation of compliance with Specifications B.4 and B.5 of Order No. 88-040.
3. A well drilling log shall be submitted for each groundwater sampling and leachate monitoring well established per this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. On-site Observations

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Monthly
P-1 thru P-'n' (perimeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Monthly

A map showing visual and perimeter compliance points (V and P stations) shall be submitted by the discharger in the quarterly monitoring report.

C. Seepage Monitoring

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
S-1 thru S-'n' (seepage)	At any point(s) at which seepage is found occurring from the waste management unit.	Standard observations for the perimeter, and standard analysis other than "i"	Daily until remedial action is taken and seepage ceases.
CU-1 (receiving waters, upstream)	Located in drainage ditches surrounding the site 200 feet upstream from the upper-most point of seepage discharge(s)	Standard observation for receiving waters and standard analysis other than "i".	Daily, during a seepage event.

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
CD-1 thru CD-'n' (receiving waters down- stream)	Located in drainage ditches surrounding the site 200 feet downstream of seepage discharge(s).	Same as receiving waters upstream.	Daily during a seepage event.

D. Groundwater Monitoring

STATION	DESCRIPTION	OBSERVATION/ ANALYSIS	FREQUENCY
MW-8 MW-8A (ground- water back- ground)	As shown on the attached site map.	Standard analysis other than "k".	Once per quarter.
MW-1 thru MW-7 and MW-4A	As shown on the attached site map.	"	"

E. Leachate Monitoring

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
LMW-1 thru LMW-4 and P-1 thru P-6	Leachate control facilities including sumps and wells to be installed. (As shown on the attached site map)	Depth of leachate built up at base of land- fill, and volume removed. Elevation of leachate above Mean Sea Level.	Once per quarter and at time of removal.

2. CONTINGENCY REPORTING

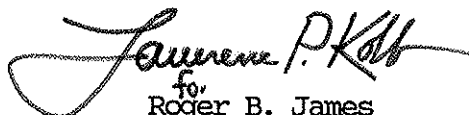
A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with this Board within five days. This report shall contain the following information: 1) a map showing the location(s) of discharge, 2) approximate flow rate, 3) nature of effects; i.e. all pertinent observations and analyses, and 4) corrective measures underway or proposed.

3. CONTINGENCY MONITORING

- A. Methane gas monitoring probes shall be installed at the site boundary nearest any structure that is constructed within 1000 feet of the Waste Management Facility . These probes shall be monitored at least once per quarter and more frequently as determined at the time of installation, and results of such monitoring rerported in the quarterly self-monitoring reports.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 88-040.
2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.


for
Roger B. James
Executive Officer

3/17/88
Date Ordered